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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,910	08/08/2001	James R. Charlton	00,283	2863

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EXAMINER	
CHEN, PO WEI	
ART UNIT	PAPER NUMBER
2697	

DATE MAILED: 06/04/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/924,910	CHARLTON ET AL.	
	Examiner	Art Unit	
	Po-Wei (Dennis) Chen	2697	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claims 1-23 are pending in this application. Claims 1, 11 and 18 are independent claims. This action is non-final

The present title of the invention is "Graphic Display of Network Performance Information".

The Group Art Unit of the Examiner case is now 2697. Please use the proper Art Unit number to help us serve you better.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 6, 7, 10, 11, 13, 14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Planas (US 6,112,015; refer to as Planas herein).

3. Regarding claim 1, Planas discloses a network management graphical user interface comprising:

A graphic process for substantially simultaneously displaying on a computer display device variations in a plurality of communication network functions (see lines 1-5 of abstract and lines 53-59 of column 6 and Fig. 4b);

(a) providing access to a plurality of communication network functions, each network function having a data value within a range of data values (see 42-45 of column 5, lines 53-59 of column 6, Fig. 4b and Fig. 2f). It is noted that while claim recites a range of data values, it's

clear that the number 192 in Fig. 2f will vary depending on the capacity for the network function and therefore a range of data values is available. Thus, limitation of claim is met.

(b) dividing a display area into a plurality of display divisions (see Fig. 4b and 4d);

(c) assigning each display division to a respective network function (see Fig. 4b);

(d) scaling a variable graphic quality of each display division to said range of data values of said network function associated with said display division ("To bubble modifier icon and the basic icon are also coloured to draw attention to them, and to reflect the severity of the alarm, where the colours yellow, orange and red are used to indicate increasing severities minor, major, and critical respectively", see lines 26-31 of column 12);

(e) periodically accessing each of said network functions to retrieve a respective current data value ("By clicking on the information icon, detailed information is then displayed", see lines 33-40 of column 11 and Fig. 12);

(f) displaying for each display division a respective variation of said graphic quality which corresponds to said current data value of the network function associated with said display division (see lines 26-31 of column 12).

4. Regarding claim 3, Planas discloses a network management graphical user interface comprising:

Scaling a variable graphic quality; (a) scaling a range of colors to said range of data values ("To bubble modifier icon and the basic icon are also coloured to draw attention to them, and to reflect the severity of the alarm, where the colours yellow, orange and red are used to indicate increasing severities minor, major, and critical respectively", see lines 26-31 of column 12).

5. Regarding claims 6 and 7, Planas discloses a network management graphical user interface comprising:

(a) linking at least one of said display divisions to additional information associated with said network function associated therewith; (b) displaying said additional information in response to graphic selection of said display division (see lines 33-40 of column 11 and lines 1-7 of column 20).

(a) linking at least one of said display divisions to graphically encoded information associated with said network function associated therewith; (b) displaying said graphically encoded information in response to graphic selection of said display division. (see lines 33-40 of column 11 and lines 1-7 of column 20).

6. Regarding claim 10, Planas discloses a network management graphical user interface comprising:

(a) displaying human readable indicia on at least one of said display divisions to thereby identify a network function associated with said one display division (see Fig. 4b).

7. Regarding claim 11, as statements presented, above, with respect to claims 1 and 3 are incorporated herein. Also, it is noted that Planas disclose (b) dividing a rectangular display area

into a plurality of display divisions (see lines 9-13 of column 6 and lines 26-28 of column 19 and Fig. 2d);

8. Regarding claim 13, as statements presented, above, with respect to claim 6 are incorporated herein.

9. Regarding claim 14, as statements presented, above, with respect to claim 7 are incorporated herein.

10. Regarding claim 16, as statements presented, above, with respect to claim 10 are incorporated herein.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 2, 4, 5, 8, 9, 12, 15 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Planas et al. (US 6,112,015; refer to as Planas herein) as applied to claim 1 above, and further in view of Baker et al. (US 5,581,797; refer to as Baker herein).

2. Regarding claim 2, it is noted that Planas does not disclose scaling a variable graphic quality; (a) scaling a shade value to said range of data values. However, this is known in the art taught by Baker. Baker teaches a method for displaying hierarchical information of a large software system that "some of the geometric shapes 307 are shaded. In FIG. 3A, this shading represents the proportion of newly written NCS line in the subsystem" (see lines 55-57 of column 5). It would have been obvious to one of ordinary skill in the art at the time of invention

to utilize the teaching of Baker, using shaded shape to represent data values of entities in a software system to provide user a greater understanding of the system through visualization (see lines 12-16 of abstract, Baker). Also, Baker discloses that the visualization method could be used other large systems (see lines 18-20 of column 8).

3. Regarding claim 4, it is noted that Planas does not disclose scaling a variable graphic quality; (a) scaling a size of a display division to said range of data values. However, this is known in the art taught by Baker. Baker teaches a method for displaying hierarchical information of a large software system that "the area of each geometric shape 307 is the same proportion to the entire display space 303 as the number of NCS lines of its corresponding subsystem has to the total number of NCS lines in the entire software system" (see lines 51-55 of column 5).

4. Regarding claim 5, Planas discloses a network management graphical user interface comprising:

At least one of said network functions includes a data set of a plurality of data members, each data member having a corresponding data member value within said range of data values ("Each container icon 'contains' a collection of network object icons", see lines 46-56 of column 6, lines 42-45 of column 5 and Fig. 2f and 4b);

(c) periodically accessing said at least one of said network functions to retrieve a respective current data member value of each of said plurality of data member ("This might expand the container icon to display the collection of network object icons or additional lower level container icons which it represents" and "By clicking on the information icon, detailed information is then displayed", see lines 50-59 of column 6 and lines 33-40 of column 11 and

Fig. 4b and 12). It is noted that each container icon such as element 82 (Transport) of Fig. 4b can be expanded to display object icons which then can be accessed to display detail information. Thus, limitation of claim is met.

It is noted that Planas does not disclose (a) dividing said display division associated with said at least one of said network functions into a plurality of display subdivisions equal to said plurality of data members of said data set; (b) assigning each of said display subdivisions to a respective one of said plurality of data members; (d) displaying for each display subdivision a respective variation of said graphic quality which corresponds to a current data member value of the data member associated with said display subdivision. However, this is known in the art taught by Baker. Baker teaches a method for displaying hierarchical information of a large software system that "the geometric shape 507 is divided into rectangles 509 that all have the same extent in the y-direction...the medium gray 524 shading that is in the foreground of window 501 represents the percentage of new NCS lines in each respective directory 509" (see lines 30-55 of column 6 and Fig. 5).

5. Regarding claim 8, Planas discloses a network management graphical user interface comprising:

(a) linking at least one of said display divisions to additional information associated with said network function associated therewith (see lines 33-40 of column 11 and lines 1-7 of column 20);

It is noted that Planas does not disclose (b) displaying said additional information in response to placement of a graphic cursor within said display division. However, this is known in the art taught by Baker. Baker teaches a method for displaying hierarchical information of a

large software system that "each window is logically linked by the location of the pointer 107 to information region 410 such that the numeric and alphanumeric regions will display the subsystem the pointer 107 is located in" (see lines 57-61 of column 6 and Fig. 1 and 4).

6. Regarding claim 9, it is noted that Planas does not disclose variable graphic quality varies in discrete steps; (a) displaying for each display division a respective step variation of said graphic quality which corresponds to said current data value of the network function associated with said display division. However, this is known in the art taught by Baker. Baker teaches a method for displaying hierarchical information of a large software system that (see lines 51-67 of column and Fig. 3A-B). It is noted that the graphic quality or shading of the regions is corresponding to the number of lines, which varies in discrete steps.

7. Regarding claim 12, as statements presented, above, with respect to claim 3 and 5 are incorporated herein.

8. Regarding claim 15, as statements presented, above, with respect to claim 8 are incorporated herein.

9. Regarding claim 17, as statements presented, above, with respect to claim 4 are incorporated herein.

10. Regarding claim 18, as statements presented, above, with respect to claims 1, 3 and 5 are incorporated herein.

11. Regarding claim 19, as statements presented, above, with respect to claim 5 and 6 are incorporated herein. Also, it is noted that Baker further disclose additional information such as shading corresponding to its data values for each subdivision (see Fig. 5).

12. Regarding claim 20, as statements presented, above, with respect to claim 7 are incorporated herein.

13. Regarding claim 21, as statements presented, above, with respect to claim 8 are incorporated herein.

14. Regarding claim 22, as statements presented, above, with respect to claim 4 are incorporated herein.

15. Regarding claim 23, as statements presented, above, with respect to claim 4 are incorporated herein. Also see lines 30-55 of column 6 and Fig. 5 of Baker.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bertram et al. (US 6,144,379) disclose "Computer Controlled User Interactive Display System for Presenting Graphs with Interactive Icons for Accessing Related Graphs".

Bereiter (US 5,909,217) discloses "Large Scale System Status Map".

Dev et al. (US 5,295,244) disclose "Network Management System Using Interconnected Hierarchies to Represent Different Network Dimensions in Multiple Display Views".

Labedz et al. (US 5,608,854) disclose "Method and Apparatus for Displaying Information in a Communication System".

Richardson (US 6,054,987) discloses "Method of Dynamically Creating Nodal Views of a Managed Network".

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Po-Wei (Dennis) Chen whose telephone number is (703) 305-8365. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (703) 305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6743 for regular communications and (703) 308-6743 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Po-Wei (Dennis) Chen
Examiner
Art Unit 2697

Po-Wei (Dennis) Chen
May 30, 2003